The National Institute on Aging and The National Institute on Drug Abuse Intramural Research Programs

Present

2007 Summer Student Poster Day

Monday, July 30, 2007

12:30 P.M. - 5:00 P.M.

Gerontology Research Center Lobby, Rooms 1-117 and 1-D-12, and Second Floor Front Hallway

Light Refreshments Will Be Served

National Institute on Aging

Brain Physiology and Metabolism Section

(1) Nishant B. Parikh (Senior)

Virginia Commonwealth University - Richmond, VA Response of neuronal cyclooxygenase-2 overexpressing mice to acute lipopolysaccharide-induced neuroinflammation Mentor: Saba Aid, Ph.D., and Francesca Bosetti, Ph.D.

(2) Yunyoung C. Chang (Sophomore)

University of Pennsylvania - Philadelphia, PA

Chronic NMDA administration increases neuroinflammatory markers in rat frontal cortex Mentor: Jagadeesh Rao, Ph.D.

Clinical Research Branch

(3) Carroll J. Wesson (Sophomore)

Tennessee State University - Nashville, TN

Risk factors for attrition in African American men in a longitudinal study Mentor: Alan Zonderman, Ph.D., and Melissa Rice, M.A.

(4) Paul T. Reidy (Senior)

Anderson University - Anderson, IN

How well can isokinetic dynamometry determine muscle power?

Mentor: Jeffrey Metter, M.D., and Luigi Ferrucci, M.D., Ph.D.

Laboratory of Cardiovascular Science

(5) Grace I. Guido (Sophomore)

Roanoke College - Salem, VA

Endogenous bufadienolide and pattern of sodium pump inhibition in Dahl salt sensitive and normotensive Sprague-Dawley rats after an acute NaCl loading Mentor: Olga Fedorova, Ph.D., and Alexei Bagrov, M.D., Ph.D.

(6) Tryphena L. Cuffy (Junior)

University of the Virgin Islands - St. Thomas, VI

Pak1 expression in cardiomyocytes

Mentor: Rui-Ping Xiao, M.D., Ph.D., and Nicole Glaser, Ph.D.

(7) Yang Zhang (Freshman)

University of Maryland, College Park - College Park, MD

FBS offset Beta2-AR-mediated contraction via PTX-sensitive pathway in rat cardiomyocytes

Mentor: Anthony Woo, Ph.D., and Rui-Ping Xiao, M.D., Ph.D.

(8) Nithin P. Suresh (Junior)

Perry Hall High School - Baltimore, MD

Col3a1 heterozygous mice as a model of the vascular form of Ehlers-Danlos syndrome: mortality

Mentor: Shannon Marshall, B.S., and Mark Talan, M.D., Ph.D.

Laboratory of Cellular and Molecular Biology

(9) Jocelyn R. Lo (Junior)

Columbia University - New York City, NY

Somatic hypermutation of the BCL6 gene in DT40 cells

Mentor: Sebastian Fugmann, Ph.D.

(10) Jennifer L. Visconti (Sophomore)

Princeton University - Princeton, NJ

Role of chromatin remodeling enzymes in neuronal gene expression

Mentor: Michael Pazin, Ph.D.

(11) Ayumi Nakamura (Junior)

University of Virginia - Charlottesville, VA

Molecular analyses of non-coding RNAs of the murine immunoglobulin heavy chain gene locus

Mentor: Ranjan Sen, Ph.D., and Tirtha Chakraborty, Ph.D.

(12) Gloria Laryea (Junior)

University of Maryland - Eastern Shore - Princess Anne, MD

Effects of NSAIDs on ovarian cancer cell motility and claudin expression

Mentor: Patrice Morin, Ph.D., and Theresa D'Souza, Ph.D.

Laboratory of Clinical Investigation

(13) Nyamekye Obeng-Adjei (2007 Graduate)

University of Maryland Eastern Shore - Princess Anne, MD

Abnormalities of the spine and reduced bone density in vascular Ehlers-Danlos syndrome Mentor: Nazli McDonnell, M.D., Ph.D.

(14) Ana L. Gustafson (Junior)

Brown University - Providence, RI

Gastrointestinal disorders in patients with hypermobile or classical Ehlers-Danlos syndromes

Mentor: Nazli McDonnell, M.D., Ph.D.

(15) Julia K. Yuskavage (1st Year Graduate)

Virginia Tech - Blacksburg, VA

Effects of high-dose isoflavones on markers of glucose homeostasis and insulin resistance in postmenopausal women

Mentor: Olga Carlson, Ph.D.

(16) Saffie Bangura (2007 Graduate)

Morgan State University - Baltimore, MD

Spine abnormailities is correlated with back pain in young persons with Ehlers-Danlos syndromes

Mentor: Nazli McDonnell, M.D., Ph.D.

(17) Tyler S. Cole (Freshman)

University of Michigan - Ann Arbor - Ann Arbor, MI

Quantitative determination of fenoterol and fenoterol derivatives in rat plasma using LC/MS

Mentor: Hee Seung Kim, Ph.D.

(18) Chirag H. Patel (Junior)

University of Maryland, Baltimore County - Baltimore, MD

Developing the new generation plasmid construct for fluoresence resonance energy transfer

Mentor: Qi Zong Lao, Ph.D.

(19) Mary E. Burchett (Junior)

Centre College - Danville, KY

Low serum testosterone in men with marfan syndrome

Mentor: Nazli McDonnell, M.D., Ph.D.

(20) Hanci Zhang (Sophomore)

Dulaney High School - Timonium, MD

High prevalence of food allergies in patients with Ehlers-Danlos syndromes

Mentor: Nazli McDonnell, M.D., Ph.D.

(21) Scott B. Covert (Sophomore)

Duke University - Durham, NC

Loading SPIO nanoparticles into HeLa cells for MRI cell tracking is accelerated using magnetofection

Mentor: Richard Spencer, M.D., Ph.D., and Kenneth Fishbein, Ph.D.

Laboratory of Epidemiology, Demography, and Biometry

(22) Amit Sachdev (1st Year)

Michigan State University - East Lansing, MI

Microscopic brain changes and cardiovascular risk factors: The Age Gene/Environment

Susceptibility-Reykjavik Study

Mentor: Lenore J. Launer, Ph.D.

(23) Hannah R. Day (2nd Year)

University of Maryland at Baltimore - Baltimore, MD

Depressive symptoms and change in physical function in older adults

Mentor: Kushang Patel, Ph.D., and Jack Guralnik, M.D., Ph.D.

(24) Ekaterina A. Eliseeva (Junior)

University of Chicago - Chicago, IL

How long can one live? The future of life expectancy and maximum life span

Mentor: Binbing Yu, Ph.D.

(25) Lydia E. Beasley (Junior)

Washington University in St. Louis - St. Louis, MO

Body composition and inflammation

Mentor: Tamara Harris, M.D., and Annemarie Koster, Ph.D.

Laboratory of Experimental Gerontology

(26) Olena T. McDowell (Junior)

Tennessee State University - Nashville, TN

In vitro cellular responses of human hepatoma cells to metformin treatment

Mentor: Joanne Allard, Ph.D., and Rafael de Cabo, Ph.D.

(27) Diana C. Quinones (Junior)

SUNY College at Old Westbury - Old Westbury, NY

Behavioral comparison of resveratrol and caloric restriction in young rats

Mentor: Kevin Pearson, Ph.D.

(28) Brett L. Wanamaker (Sophomore)

University of Michigan - Ann Arbor - Ann Arbor, MI

Exercise and metformin: effects in rats fed a high-fat diet

Mentor: Joanne Allard, Ph.D., and Rafael de Cabo, Ph.D.

(29) Krishna J. Stephen (Junior)

Tennessee State University - Nashville, TN

Determination of trans-resveratrol metabolite levels in monkey serum via HPLC method

Mentor: Rafael de Cabo, Ph.D., and Kevin Pearson, Ph.D.

(30) Rebecca E. Wright (Junior)

Ohio Northern University - Ada, OH

Metformin and a high fat diet: in vivo and in vitro effects on neuronal cells Mentor: Joanne Allard, Ph.D., and Rafael de Cabo, Ph.D.

Laboratory of Genetics

(31) Kyle D. Kovacs (Junior)

Harvard College - Cambridge, MA

Functional studies on new components of the fanconi anemia core complex Mentor: Weidong Wang, Ph.D., and Zhijiang Yan, Ph.D.

(32) Wenqi (Jack) Wang (Senior)

Texas Academy of Mathematics and Science - Denton, TX Pattern analysis of melanoma tissue sections using WND-CHARM Mentor: Ilya Goldberg, Ph.D.

(33) Laurel W. Cummings (Sophomore)

University of Maryland - College Park, MD

Time-dependent EDA action for skin appendage development

Mentor: David Schlessinger, Ph.D., and Chang-Yi Cui, M.D., Ph.D.

(34) Jose M. Cordero (Sophomore)

University of Puerto Rico - Mayaguez Campus - Mayaguez, PR

Quantitative morphometry of mouse tissue during aging

Mentor: Ilya Goldberg, Ph.D.

(35) Hua-Jay J. Cherng (Junior)

Centennial High School - Ellicott City, MD

Characterization of FOXL2 anti-testis function in transgenic mice

Mentor: David Schlessinger, Ph.D., and Emanuele Pelosi, Ph.D.

(36) Lauren E. Wilson (2007 Graduate)

Hamilton College - Clinton, NY

Analysis of a new component of Bloom's syndrome protein complexes

Mentor: Weidong Wang, Ph.D., and Dongyi Xu, Ph.D.

Laboratory of Molecular Gerontology

(36) Alyse N. Chong (Senior)

Loyola Marymount University - Los Angeles, CA

Characterization of human SUV3 helicase

Mentor: Vilhelm Bohr, M.D., Ph.D., and Penelope Mason, Ph.D.

(38) Oyindamola Oladosu (Junior)

University of Maryland Eastern Shore - Princess Anne, MD

The role of Rad52 in preventing oxidative DNA damage in mammalian cells

Mentor: Nadja Souza-Pinto Lardner, Ph.D.

(39) Nina A. Rawtani (Sophomore)

University of Maryland College Park - College Park, MD

Novel biochemical function and protein partner of the FANCJ helicase implicated in fanconi anemia

Mentor: Robert Brosh, Jr., Ph.D.

Laboratory of Immunology

(40) Jie Deng (Junior)

University of Florida - Gainesville, FL

Role of chemokine receptors in lung metastasis in breast cancer

Mentor: Arya Biragyn, Ph.D., and Purevdorj Olkhanud, M.D.

(41) Adam E. Bazari (Freshman)

Columbia University - New York City, NY

Expression of full-length and alternate splicing variants of telomerase reverse transcriptase (hTERT) in human T cells

Mentor: Nan-ping Weng, M.D., Ph.D., and Xiaochun Chen, Ph.D.

(42) Divya Enika (Freshman)

Drexel University - Philadelphia, PA

Analysis of T- and B-lymphocyte profiles in young and aged myostatin knockout mice Mentor: Ana Lustig, M.S., and Dennis Taub, Ph.D.

(43) Chineye D. Emeche (2007 Graduate)

University of Maryland Eastern Shore - Princess Anne, MD

Wnt5a downregulates tumor antigens critical for immune surveilance in melanoma Mentor: Ashani Weeraratna, Ph.D., and Samudra Dissanayake, Ph.D.

(44) Katherine M. Kielek (1st Year)

Philadelphia College of Osteopathic Medicine - Philadelphia, PA

Filamin modulates motility and invasiveness in metastatic melanoma cell lines

Mentor: Ashani Weeraratna, Ph.D., and Michael O'Connell, Ph.D.

Laboratory of Neurosciences

(45) Edmund B. Chen (Junior)

The Johns Hopkins University - Baltimore, MD

The cellular adhesion molecule, CHL1, and its role in a mouse model of ischemia Mentor: Mohammed Mughal, Ph.D., and Mark Mattson, Ph.D.

(46) Elaine L. Pranski (2007 Graduate)

Washington College - Chestertown, MD

Effects of overexpression of cytochrome b5 reductase on cellular stress responses Mentor: Dong-Hoon Hyun, Ph.D., and Mark Mattson, Ph.D.

(47) Charmaine I. Jamias (Sophomore)

University of California, Los Angeles - Los Angeles, CA

Elucidating stromal derived inducing activity (SDIA): the effects of HGF, SDF1-alpha and VEGF on dopaminergic neuron and neural differentiation of pluripotent stem cells Mentor: Catherine Schwartz, B.S., and Justin Lathia, M.S.

(48) Roderick W. Woods (2007 Graduate)

University of Maryland Eastern Shore - Princess Anne, MD

Gene expression changes in cortical neurons after chronic tetrodotoxin treatment Mentor: Marc Gleichmann, Ph.D.

(49) Gary R. Nelson (1st Year)

University of Iowa - Iowa City, IA

Effects of acute peripheral lipopolysaccharide (LPS) intoxication on rat plasma and brain TNF- α levels: Actions of drug interventions on TNF- α protein synthesis Mentor: Nigel Greig, Ph.D., and David Tweedie, Ph.D.

(50) Sara E. Fridinger (Junior)

Villanova University - Villanova, PA

DAF-2/insulin-like signaling affects the efficiency of RNAi in a variety of tissues in Caenorhabditis elegans

Mentor: Catherine Wolkow, Ph.D.

(51) Jigna S. Patel (Freshman)

Brunel University – London, England

Genetic mapping of mg227, a mutation in C. elegans nematodes that can suppress the larval diapause phenotype of age-1/PI3 kinase mutants

Mentor: Catherine Wolkow, Ph.D.

(52) Ugochukwu C. Nnodu (Senior)

Tennessee State University - Nashville, TN

Impact and interaction of age, energy intake and sex on the mouse eye transcriptomes Mentor: Xiangru Xu, Ph.D.

(53) Chandamany Arya (Freshman)

University of Maryland - College Park, MD

Histaminic signaling in a p53 null cell line

Mentor: Stuart Maudsley, Ph.D., and Matthew Stone, Ph.D.

Laboratory of Personality & Cognition

(54) Diana L. Frosell (2007 Graduate)

University of Delaware - Newark, DE

Healthy Aging in Neighborhoods of Diversity across the Life Span (HANDLS) dietary

supplement database: the development and preliminary findings

Mentor: Alan Zonderman, Ph.D., and Marie Kuczmarski, Ph.D.

Molecular Dynamics Section

(55) Maitreyi Sahu (Freshman)

Johns Hopkins University - Baltimore, MD

Beta amyloid level in blood plasma in Alzheimer's subjects of Gemini study

Mentor: Joy Mohanty, Ph.D., and Joseph Rifkind, Ph.D.

Research Resources Branch

(56) R. Alexander Kuczmarski (Junior) and Alok Mohanty (Junior)

Long Reach High School - Columbia, MD

Protein Bank webpage

Mentor: James Engel and Chuck Weber

(57) Michael N. Brodeur (Junior)

Brigham Young University - Provo, UT

Labeling, isolation, and microarray analysis of nascent RNA via BrUTP (bromouridine

triphosphate) in vitro and in vivo

Mentor: Kevin G. Becker, Ph.D.

(58) Pierre Chaker (Junior)

Towson University - Towson, MD

Genetically modified mice strains currently used as models of human aging related

diseases at the Gerontology Research Center

Mentor: Suresh Poosala, D.V.M., Ph.D.

National Institute on Drug Abuse

Behavioral Neuroscience Research Branch

(59) Ifigenia I. Flores (Senior)

American University - Washington, DC

Neuronal activation in the rat nucleus accumbens following exposure to a flavor associated with intragastric glucose infusions.

Mentor: Elizabeth Duncan, Ph.D., and Roy Wise, Ph.D.

(60) Jennifer M. Ortega (Senior)

California Academy of Mathematics and Science - Carson, CA

The role of the endogenous cannabinoid system in learning and memory through a passive avoidance task

Mentor: Steven Goldberg, Ph.D., and Julie Medalie

(61) Grace Z. Wang (Sophomore)

Washington and Lee University - Lexington, VA

Ethanol-induced alterations in hippocampal neurotransmission and protective role of kappa-opioid antagonism in memory impairment

Mentor: Vladimir Chefer, Ph.D., and Toni Shippenberg, Ph.D.

(62) Kelsey Riley (Junior)

Kenwood Academy High School - Chicago, IL

The influence of persistent inflammation on kappa opioid receptor mediated antinociception

Mentor: Raf Schepers, Ph.D.

(63) Alvin J. Rucker (Senior)

Wilde Lake High School - Columbia, MD

Pentobarbital modulates cocaine-induced Fos expression in rat striatum

Mentor: Bruce Hope, Ph.D.

(64) Kevin Thornton (Junior)

Miller Grove High School - Lithonia, GA

Effects of infusion duration on the acquisition of cocaine self-administration

Mentor: Charles Schindler, Ph.D.

(65) Amartha N. Ogburu (Senior)

Heathwood Hall Espiscopal School - Columbia, SC

Distribution of tryptophan hydroxylase in the rostral ventromedial medulla of the rat using immunohistochemistry techniques

Mentor: Eric Oh, B.A., and Toni Shippenberg, Ph.D.

(66) Zarrah Keshwani (Sophomore)

Johns Hopkins University - Baltimore, MD

Increasing endogenous cannabinoid levels by inhibiting fatty acid amino hydrolase (FAAH) alters the reinforcing and anxiety altering effects of nicotine in rats Mentor: Steven Goldberg, Ph.D., and Zuzana Justinova, M.D., Ph.D.

(67) Justin D. Vassar (Senior)

Williams College - Williamstown, MA

Role of the kappa-opioid receptor in the acquisition of goal-directed vs. habitual behavior Mentor: Agustin Zapata, Ph.D.

(68) Deja S. Sanders (Senior)

Gwendolyn Brooks College Preparatory Academy - Chicago, IL Effects of methamphetamine on locomotor abilities of Nrf2-knockout mice Mentor: Brandon Harvey, Ph.D., and Yun Wang, M.D., Ph.D.

(69) John P. McClure (Junior)

De La Salle Academy - Manhattan, NY

Role of D1 dopamine receptors in medial and lateral accumbens shell in context-and cue-induced reinstatement of heroin seeking

Mentor: Yavin Shaham, Ph.D., and Jennifer Bossert, Ph.D.

(70) Jesaka C. Davitt (Senior)

Redlands High School - Redlands, CA

The effects of methamphetamine on endothelial cells in vitro

Mentor: Brandon Harvey, Ph.D., and Yun Wang

Cellular Neurobiology Research Branch

(71) John Soltys (Junior)

University of Vermont - Burlington, VT

Assessment of dopaminergic function in cannabinoid CB1 receptor knockout mice Mentor: Alex Hoffman, Ph.D.

(72) Lina M. Montoya (Junior)

Atholton High School - Columbia, MD

Expression of vesicular glutamate transporter 2 mRNA in the VTA neurons of methamphetamine treated rats

Mentor: Marisela Morales, Ph.D.

(73) Adedoyin A. Okulate (Junior)

The Lawrenceville School - Lawrenceville, NJ

The pudunculopontine tegmental nucleus has three distint sub-populations of neurons: cholinergic, glutamatergic, and GABAergic

Mentor: Marisela Morales, Ph.D.

(74) Blanca C. Carrera (Junior)

California Academy of Mathematics and Science - Carson, CA

The laterodorsal tegmental nucleus has three sub-populations of neurons; cholinergic, glutamatergic, and GABAergic

Mentor: Marisela Morales, Ph.D.

(75) Bernadette Y. Hsu (Senior)

Peak to Peak Charter School - Lafayette, CO

Regulation of the tyrosine hydroxylase gene expression in EF1-hrGFP/hES cell line by sodium butyrate

Mentor: Jia Chen, M.D.

(76) Suma Chandrasekaran (Junior)

University of Michigan - Ann Arbor, MI

The effect of SV40 T155 immortalization on p53 exon 5 in rat mesencephalic cell lines Mentor: Mark Coggiano, M.S.

(77) Giao Nguyen (Senior)

The Preuss School University of California-San Diego - La Jolla, CA

Compartmentalization of Bcl-2 at the interface between endoplasmic reticulum and mitochondria

Mentor: Teruo Hayashi, M.D., Ph.D., and Tsung-Ping Su

Clinical Pharmacology and Therapeutics Research Branch

(78) Paul T. Harrell (2nd Year Graduate)

American University - Washington, DC

Cigarette smoking among cocaine- and opioid-dependent outpatients

Mentor: David Gorelick, M.D., Ph.D.

(79) Jennifer M. Slock (Senior)

Gettysburg College - Gettysburg, PA

Mu-opioid receptors on red blood cells of cocaine addicts

Mentor: David Gorelick, M.D., Ph.D.

(80) Melanie To (Junior)

The Preuss School University of California-San Diego - La Jolla, CA

Interaction of salvinorin A analogs with delta opioid receptors II

Mentor: Richard Rothman, M.D., Ph.D., and Joseph Pariser, B.S.

(81) Dacone Elliott (Junior)

Phillips Academy Andover - Andover, MA

Interaction of salvinorin A analogs with delta opioid receptors I

Mentor: Richard Rothman, M.D., Ph.D., and Joseph Pariser, B.S.

Medications Discovery Research Branch

(82) Wenjie Xiao (Junior)

Emory University - Atlanta, GA

The effects of citalogram on choice between immediate and delayed reinforcers Mentor: Jonathan Katz, Ph.D., and Paul Soto, Ph.D.

(83) Emily E. Biliouris (Senior)

Bates College - Lewiston, ME

Effects of a dopamine transporter blocker on dopamine neurotransmission:

a microdialysis study in rats

Mentor: Jonathan Katz, Ph.D.

(84) Daniel Silverman (Sophomore)

Pennsylvania State University - University Park, PA

Conditioned place preference effects of benztropine and rimcazole analogs

Mentor: Jonathan Katz, Ph.D.

(85) Michael R. Guarino (Senior)

Johns Hopkins University - Baltimore, MD

Conditioned place preference effects of putative cocaine antagonists

Mentor: Jonathan Katz, Ph.D.

(86) Avanti Reddy (Senior)

Masuk High School - Monroe, CT

Stereotype behavior in mice induced by drugs acting at dopamine receptors

Mentor: Jonathan Katz, Ph.D.

Molecular Neurobiology Research Branch

(87) Thomas L. Gallagher (Junior)

State University of New York Geneseo - Geneseo, NY

Effects of methamphetamine on locomotion in C. elegans

Mentor: Branden Harvey, Ph.D.

(88) Zhao Liu (Sophomore)

University of Maryland, College Park - College Park, MD

Ethanol consumption in dopamine transporter and serotonin transporter knockout mice

Mentor: F. Scott Hall, Ph.D., and George Uhl, M.D., Ph.D.

(89) Rachael M. Krieger (Junior)

University of Maryland, College Park - College Park, MD

Novel object discrimination task in KEPI (PPP1R14C) knockout mice

Mentor: Jana Drgonova, Ph.D., and George Uhl, M.D., Ph.D.

(90) Meghan E. Graham (Senior)

University of Maryland - College Park, MD

Behavior of dopamine transporter knockout mice in the morris water maze: impaired learning or behavioral competition?

Mentor: F. Scott Hall, Ph.D., and George Uhl, M.D., Ph.D.

(91) Ranny Zhao (Sophomore)

Thomas S. Wootton High School - Rockville, MD

Association study between the EPS8 gene polymorphisms and alcohol dependence Mentor: Akitoyo Hishimoto, M.D., Ph.D., and George Uhl, M.D., Ph.D.

(92) Kara Crutcher (Junior)

Francis W. Parker High School - Chicago, IL

Association study of single nucleotide polymorphisms and alternative splicing patterns of cell adhesion molecules in Alzheimer's disease

Mentor: Tim Lui, Ph.D., and George Uhl, M.D., Ph.D.

Molecular Neuropsychiatry Research Branch

(93) Usiwoma Abugo (Junior)

University of Notre Dame - Notre Dame, IN

Serum withdrawal-induced changes in transcriptional profiles in an immortalized mesencephalic cell line, CSM14.1

Mentor: Michael McCoy, B.A.

(94) Angela Cesena (Senior)

California Academy of Mathematics and Science - Carson, CA

Methamphetamine-induced toxicity underlies behavioral impairments in Balb/c mice Mentor: Irina Krasnova, Ph.D.

(95) Stephanie D. Buie (Sophomore)

Bowie State University - Bowie, MD

Expression of caspase-8 in the hippocampus after toxic doses of methamphetamine Mentor: Subramaniam Jayanthi, Ph.D.

(96) Prashanth Shanmugham (Senior)

Suncoast Community High School - Riviera Beach, FL

Immunoblot analysis of caspase-8 in methamphetamine induced apoptosis

Mentor: Subramaniam Jayanthi, Ph.D.

(97) Natalia M. Diaz-Rodriguez (2nd Year)

American University - Washington, DC

Distribution of N-WASP in the rat brain

Mentor: Xiaolin Deng, Ph.D., and Jean Lud Cadet, M.D.

(98) Victor N. Browne (Junior)

St Croix Educational complex - Kingshill, VI

Quantitative PCR analysis of methamphetamine-induced changes in the expression of members of the KLF family of genes in the rat striatum

Mentor: Mike McCoy, M.S., and Jean Lud Cadet, M.D.

(99) Ekaterina Ivanova (Sophomore)

University of Maryland - College Park, MD

Analysis of methamphetamine-induced DNA fragmentation in the mouse brain

Mentor: Irina Krasnova, Ph.D.

(100) Kyle Rothman (Senior)

Glenelg Country School - Ellicott City, MD

Methamphetamine changes N-WASP expression in the mouse brain

Mentor: Xiaolin Deng, Ph.D., and Jean Lud Cadet, M.D.

(101) Colin O'Banion (Senior)

University of Rochester - Rochester, NY

Astaxanthin as an antioxidant

Mentor: Brandon Harvey, Ph.D.

(102) Samantha Luo (Junior)

Centennial High School - Ellicott City, MD

Construction and characterization of AAV-delivered HOMER2 siRNA: regulation of

HOMER2 expression

Mentor: Matthew Chiocco, Ph.D., and Brandon Harvey, Ph.D.

(103) Ang Li (Senior)

Troy High School - Troy, MI

Detection of nitric oxide using electrochemical sensors

Mentor: Yun Li, Ph.D.

(104) Robert D. Wardlow II (Senior)

Cherry Hill High School, West - Cherry Hill, NJ

The effects of methamphetamine on rat mesencephalic CSM14.1 cell line

Mentor: Ning-Sheng Cai, Ph.D.

(105) Kenny L. Ortiz (Senior)

Millbrook School - Millbrook, NY

Methamphetamine induced effects on serum response factors in the rat striatum

Mentor: Bruce Ladenheim, B.A.